

## Northeast Coastal and Barrier Network Natural Resources and Related Issues identified in Park General Management Plans and Resource Management Plans (created 2005)

General Management Plan		Resource Management Plan	
Assateague Island NS			
<ul style="list-style-type: none"><li>Barrier beach and dune system</li><li>Beach grass shrub thicket, wetland forest, and salt marsh communities</li><li>Assateague pony, peregrine falcon, Delmarva fox squirrel, osprey, eastern merlin, Ipswich sparrow, and Atlantic loggerhead turtle</li><li>Dynamic physical and ecological processes and natural succession</li><li>Management of exotic plants and animals</li><li>Assateague ponies managed as a desirable feral species</li><li>Visitor-operated vehicles limited to certain zones and for certain purposes</li><li>Collaborate on implementing a plan to slow, stop, or reverse the shoreward erosion of northern Assateague Island</li><li>Protection of habitats of endangered flora and fauna</li><li>Maryland upland game hunting will continue</li><li>In some areas dune breaks and crossings will be repaired or maintained</li><li>Beach recreation, fishing, clamming, crabbing, mussel gathering, canoeing and wildlife observation will be permitted</li></ul>		<ul style="list-style-type: none"><li>Freshwater ponds, saltmarsh wetlands, tidal mudflats, seagrass beds, and open water habitats</li><li>Assateague pony , Sika deer, tundra peregrine falcon, loggerhead sea turtle, Delmarva fox squirrel and piping plover</li><li>Wintering waterfowl populations</li><li>Reptiles and amphibians</li><li>Marine mollusks</li><li>Submerged aquatic vegetation</li><li>Marine finfish, shellfish, and benthic invertebrates</li><li>Freshwater fish and invertebrates</li><li>Phragmites</li><li>Artificial dune systems preventing overwash processes</li><li>Past development activity</li><li>Remnant roadbeds and mosquito control drainage ditches</li><li>Disruption of natural coastal processes outside the Seashore's boundaries</li><li>Assateague pony herd influence on vegetation</li><li>Sika deer competition with the native white-tailed deer</li></ul>	<ul style="list-style-type: none"><li>Recreational visitor use impacts on shorebirds, including plovers</li><li>Loss of wetlands and submerged habitats</li><li>Marine and estuarine impacts from dredging, motor vessel use, fisheries, increased nutrient input, increased surface water runoff, and contamination by toxic elements</li><li>Changes in local/regional land use practices</li><li>Limited information on algae, liverworts, mosses, lichen, and fungi</li><li>Development of management strategies including fire management, exotic species, ORV use, dune management, adjacent land use, and feral pony herd management and island dynamics at the North End</li><li>Restoration of impacted resources, emphasizing species of special concern, mitigation of visitor use and external impacts, and the reversal of past management and land use practices</li></ul>
Cape Cod NS			
<ul style="list-style-type: none"><li>Turbidity impacts to flora and fauna along the bayside shore</li><li>Pollutant impacts to the bayside ecosystem from marinas</li><li>Improve air quality</li><li>Allow natural shoreline processes to take place unimpeded</li><li>Protect ground and surface water</li></ul>	<ul style="list-style-type: none"><li>Manage native biotic resources by allowing natural processes to continue unimpeded except where appropriate to selectively manage for native biological diversity or rare species or communities</li></ul>	<ul style="list-style-type: none"><li>Pitch pine/oak forest, heathlands, dunes, coastal plain pond shores and barrier spits</li><li>Sole source aquifer, kettle and dune ponds, streams and rivers, freshwater marshes, sphagnum and cranberry bogs, red maple and white cedar swamps, vernal ponds, brackish impoundments, intertidal salt marshes, mud and sand flats, eelgrass and marine algae beds, rockweed and barnacle communities,</li></ul>	<ul style="list-style-type: none"><li>Protection and restoration of federal and state listed rare species and communities</li><li>Consumptive uses of resources</li><li>Air pollution</li><li>Sea level rise</li><li>Allow natural shoreline processes to take place unimpeded</li></ul>

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<ul style="list-style-type: none"> <li>quality and quantity, and wetlands</li> <li>• Upgrade septic treatment facilities to reduce nitrates</li> <li>• Correct runoff point sources</li> <li>• Develop resource management plans for all kettle ponds</li> <li>• Research and monitor effects of aquaculture on marine resources</li> <li>• Restore the natural hydrography and ecology of estuaries</li> <li>• Utilize fire management to restore or simulate natural role of fire</li> </ul>	<ul style="list-style-type: none"> <li>• Develop management plans for heathlands</li> <li>• Restore native habitats and disturbed areas</li> <li>• Develop non-native species management program</li> <li>• Review and permit finfish and aquatic plant aquaculture based on strict conditions</li> <li>• Develop a comprehensive pest management program</li> </ul>	<ul style="list-style-type: none"> <li>and open marine waters</li> <li>• 32 state listed plant species</li> <li>• 14 federally listed wildlife species and an additional 58 state-listed species</li> <li>• Non-native plant and animal species</li> <li>• Impacts of development on water quality and quantity</li> <li>• Accelerated rates of freshwater and coastal marine eutrophication</li> <li>• Impacts of recreation on natural resources</li> <li>• Effects of landscape changes since European settlement</li> </ul>	<ul style="list-style-type: none"> <li>• Protect ground and surface water quality and quantity</li> <li>• Restore natural hydrography and ecology of estuaries</li> <li>• Manage native biotic resources</li> <li>• Manage special uses affecting wildlife populations and other biotic resources</li> <li>• Engage in cooperative regional efforts to improve air quality</li> <li>• Implement comprehensive and long-term program of ecological monitoring and research</li> </ul>
<b>Colonial NHS</b>			
<ul style="list-style-type: none"> <li>• Chesapeake Bay, James and York Rivers, and tributaries</li> <li>• Tidal salt water and estuarine wetlands, and freshwater wetlands</li> <li>• Coastal plain sediments</li> <li>• Federally listed bald eagle and several state listed flora and fauna species</li> <li>• Hardwood and pine-hardwood forests</li> <li>• Saltmarsh and freshwater wetland vegetation</li> <li>• Submerged aquatic vegetation</li> <li>• Protect rare, threatened, and endangered species by developing sub-zones within historic zones for protection and management</li> <li>• Protect wetlands and floodplains</li> <li>• Limit disturbance in upland areas</li> <li>• Develop inventory and database of natural resources</li> <li>• Develop an active resource monitoring program</li> <li>• Cooperate with other agencies and landowners to promote resource preservation</li> </ul>		<ul style="list-style-type: none"> <li>• Marine and freshwater wetland habitats, including forested and emergent wetlands</li> <li>• Pine, pine-hardwood, and hardwood forests</li> <li>• Open fields, freshwater and estuarine rivers, ponds, coastal bluffs and ravines</li> <li>• Yorktown onions</li> <li>• Several national champion specimen trees</li> <li>• 9 VA Natural Heritage - listed species</li> <li>• Birds, fish, mammals, aquatic invertebrates, plants and wetlands typical of the mid-Atlantic Coastal Plain</li> <li>• Upland and tidal streams, freshwater and brackish ponds along Colonial Parkway</li> <li>• A freshwater spring and a small creek at Green Spring plantation</li> <li>• Springs and seeps on Yorktown Battlefield</li> <li>• Ephemeral ponded sinkholes in the Yorktown Battlefield and along the Parkway</li> <li>• Effects of activities outside Park boundaries on water quality within the park (oil spills, erosion and sedimentation, chemicals)</li> </ul>	<ul style="list-style-type: none"> <li>• Shoreline erosion and recession</li> <li>• Potential local sources of nitrate and ammonia in groundwater</li> <li>• Development and implementation of invasive species mitigation and vegetation management programs for fields, shorelines and earthworks</li> <li>• Biological and physical study of sinkholes and the geohydrological framework as part of the inventory of the Yorktown Battlefield environs</li> <li>• Surface and Ground water analysis and long-term monitoring</li> <li>• Study of reptiles and amphibians</li> <li>• Cooperative deer population and management research and monitoring</li> <li>• Design and implement a long-term environmental monitoring program</li> <li>• Flora surveys are needed</li> </ul>

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Fire Island NS			
<ul style="list-style-type: none"><li>• Dune line fringing beach</li><li>• Freshwater bog habitats</li><li>• Tidal marshes</li><li>• Skirted Pine Fire Island Lighthouse tract vegetation</li><li>• Sunken Forest</li><li>• Maritime forest at Point O'Woods</li><li>• Old Inlet dunes and marsh</li><li>• High marsh area south of Hospital Island</li><li>• Watch Hill interpretive area</li><li>• Clam pond area coves and marshes</li><li>• Nesting common tern habitat on John Boyle Island</li><li>• Tidal marshes, swamps, and ponds on Floyd Estate</li><li>• Protect natural resources of beaches and dunes, maritime holly forests of the Sunken Forest, and experimental marsh next to Barrett Beach</li><li>• Maintain water quality of Great South Bay and aquifers underlying Fire Island area</li></ul>		<ul style="list-style-type: none"><li>• Tidal ponds at Floyd Estate</li><li>• Fresh and brackish water ponds</li><li>• Air quality</li><li>• Primary dune, swale, secondary dune, maritime forest, fresh water marsh/bogs, and salt-water marsh vegetation communities</li><li>• Beach amaranth</li><li>• Piping plover, gulls, terns, osprey, northeast beach tiger beetle, and eastern mud turtle</li><li>• Pest species - Norway rat, wood boring insects, gypsy moth, mosquitoes</li><li>• Water quality in Great South Bay and ocean and bayside beaches</li><li>• Weather stations require maintenance</li><li>• Wildlife distribution and impacts data</li><li>• Exotic species on Fire Island, including Phragmites in the Wilderness area marsh</li><li>• Impacts of browsing and plant dominance on Sunken forest plant communities</li><li>• Lyme disease</li><li>• Turbidity impacts to flora and fauna along the bayside shore</li></ul>	<ul style="list-style-type: none"><li>• Pollutant impacts to the bayside ecosystem from marinas</li><li>• Impacts of home bulkheading and scraping on dunes</li><li>• Aircraft noise in wilderness area</li><li>• Complete IPM and Fire Mgt Plans</li><li>• Control autumn olive and tree of heaven at Floyd Estate</li><li>• Survey recreational and commercial fishing</li><li>• Clarify the condition and impacts of fresh water ponds</li><li>• Implement geologic resources monitoring program for dunes</li><li>• Develop an Inventory and Monitoring program for park vegetation</li><li>• Plan habitat restoration activities following protection of vehicle free areas and rare species research</li><li>• Monitor human disturbance of rare species habitat and mitigate</li><li>• Monitor visibility by photo-documentation</li></ul>
Gateway NRA			
<ul style="list-style-type: none"><li>• Holly forest at Sandy Hook</li><li>• High and low salt marshes, primary dunes, freshwater marshes, and beach heather communities</li><li>• Waterbird nesting sites</li><li>• Identify, preserve, and provide for visitor appreciation of fish, wildlife, and other natural resources</li><li>• Protect wildlife refuge in Jamaica Bay</li><li>• Improve air and water quality</li></ul>	<ul style="list-style-type: none"><li>• Minimize air and water pollution in Jamaica Bay</li><li>• Protect tern nesting sites</li><li>• Employ habitat management techniques to protect wildlife, including migratory bird and butterfly species</li><li>• Study phragmites role in the marsh ecosystem</li><li>• Employ biological control of ticks, mosquitoes, green flies etc... wherever possible.</li></ul>	<ul style="list-style-type: none"><li>• Ecology Village Pine Forest</li><li>• Jamaica Bay ponds</li><li>• Staten Island breeding birds, aquatic invertebrates and freshwater wetlands</li><li>• Sandy Hook ponds</li><li>• Great Kills salt marsh peat</li><li>• Rare plants including seabeach amaranth and seabeach knotweed</li><li>• Osprey</li></ul>	<ul style="list-style-type: none"><li>• Cavity nesting birds</li><li>• Grassland bird habitat</li><li>• Swamp white oak forest</li><li>• Exotic plants - Oriental bittersweet, Japanese honeysuckle, porcelain berry, Japanese black pine, autumn olive, and phragmites</li><li>• Jamaica Bay estuarine and terrestrial impacts from landfill contaminants</li><li>• Vegetation impacts by vehicles</li></ul>

General Management Plan		Resource Management Plan	
George Washington Birthplace NM			
From Statement for Management (1986) <ul style="list-style-type: none"><li>Secure through research, or other means, adequate information to facilitate information and perpetuation of the Pope's Creek Farm and other historical and natural resources</li><li>Preserve...the quality of natural scenes</li></ul>		<ul style="list-style-type: none"><li>Open fields and forests</li><li>Historic trees approaching 200 years in age</li><li>Fresh water and brackish marshes, estuaries, three freshwater ponds</li><li>Beach and dune assemblages</li><li>Hydric and non-hydric soils</li></ul>	<ul style="list-style-type: none"><li>Bald eagles</li><li>Wintering waterfowl</li><li>White-tail deer</li><li>Pope's and Bridge's Creeks</li><li>Gypsy moth</li><li>Phragmites</li></ul>
Sagamore Hill NHS			
GMP planning in process		<ul style="list-style-type: none"><li>Open fields</li><li>Woodlands</li><li>Two glacial ponds</li></ul>	<ul style="list-style-type: none"><li>Marsh</li><li>Beach</li><li>Develop natural resources information</li></ul>
Thomas Stone NM			
<ul style="list-style-type: none"><li>Coastal plain geology and soils</li><li>Springs and ravines draining to Hoghole Run</li><li>Non-tidal freshwater wetlands, including farm pond, forested and emergent wetlands</li><li>Mixed hardwood and pine forests with regionally representative shrub understory</li><li>Oak decline syndrome</li><li>Beaver, white-tail deer, and Bluebirds</li><li>Gypsy moths</li></ul>	<ul style="list-style-type: none"><li>Ticks and Lyme disease</li><li>Air quality</li><li>Manage and protect the natural resources of the site consistent with the need to interpret agrarian lifestyles and re-establish historic landscapes</li><li>Provide wildlife habitat and preserve the existing wooded areas to prevent further erosion</li><li>Improve the quality of surface water that enters Hoghole Run</li><li>Restore pond areas to natural and historic condition</li></ul>	<ul style="list-style-type: none"><li>Wildlife and plants typical of a Southern Maryland wooded area</li><li>Eastern bluebirds</li><li>Several small streams emptying into Hoghole Run</li><li>One spring-fed pond</li><li>Maintain wildlife habitat by preserving the existing wooded areas to prevent further erosion of the ravines and streambeds</li></ul>	